



Senior Engineering Geologist

G999 – 3751 – 3PB48

Department(s): Department of Toxic Substances Control
Opening Date: 02/24/2014
Final Filing Date: Continuous
Type of Examination: Open, departmental
Salary: Supervisor: \$7377 - \$9234
Technical Specialist: \$8122 - \$10166

EEO

An equal opportunity employer to all regardless of race, color, religion, sex, gender identity or expression, national origin, age, ancestry, disability, marital status, political affiliation, sexual orientation, or genetic information.

DRUG-FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

WHO SHOULD APPLY?

Applicants who meet the Minimum Qualifications as stated on this bulletin may apply for and take this Training and Experience Evaluation at any time.

Once you have taken the Training and Experience Evaluation, you may not retake it for twelve (12) months.

FILING INSTRUCTIONS

Final Filing Date: Continuous

Where to Apply: Click the link at the bottom of this bulletin.

SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special assistance or special testing arrangements, contact the California Department of Human Resources (CalHR), Examination Services at (866) 844-8671, or via the California Relay Service for the Deaf or Hard of Hearing at (800) 735-2929 from TTY Phones and (800) 735-2922 from voice phones.

SALARY INFORMATION

Supervisor: \$7377 - \$9234
Technical Specialist: \$8122 - \$10166

ELIGIBLE LIST INFORMATION

An open, merged eligible list will be established by the California Department of Human Resources for use by the Department of Toxic Substances Control. The names of successful competitors will be merged onto the eligible list in order of final score regardless of test date. Eligibility expires twelve (12) months after it is established. Competitors must then retake the Training and Experience Evaluation to

reestablish eligibility.

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

NOTE: All applicants must meet the education and/or experience requirements as stated on this examination bulletin as of the date the test is taken.

MINIMUM QUALIFICATIONS

All Levels:

Education: Equivalent to graduation from college with major work in geology, engineering geology, or a closely related field that includes coursework in geology. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) (Registration as a senior in a recognized institution will admit applicants to the Engineering Geologist examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.)

Senior Engineering Geologist and Above

Possession of a valid certificate of registration as a geologist or geophysicist issued by the California Board of Geologists and Geophysicists is required for appointment to the Senior Engineering Geologist level and above.

Senior Engineering Geologist

Either I

Experience: Two years of experience performing the duties of an Engineering Geologist, Range D, in the California state service.

Or II

Experience: Five years of professional engineering geological experience involving the performance of increasingly responsible duties, at least two years of which shall have been comparable in level and responsibility to an Engineering Geologist, Range D, in the California state service. (A master's degree with major work in geology or engineering geology may be substituted for one year of the required experience. Possession of a doctorate degree in one of the fields identified above may be substituted for two years of the general experience.)

POSITION DESCRIPTION

The Senior Engineering Geologist is either (1) a first-line unit supervisor; or (2) a nonsupervisory staff specialist assigned to perform the most complex and technical engineering geologic assignments. The senior level is the first level to which administrative responsibility is assigned.

EXAMINATION INFORMATION

TRAINING AND EXPERIENCE EVALUATION – Weighted 100%

The examination will consist solely of a Training and Experience Evaluation. To obtain a position on the eligible list, a minimum score of 70% must be received. An applicant will receive his/her score upon completion of the Training and Experience Evaluation process.

[Click here to preview the Training and Experience Evaluation.](#)

KNOWLEDGE AND ABILITIES

Knowledge of:

- The properties of hazardous materials to provide a context for their characterization and mitigation.
- Soil mechanics to describe materials for use in site characterization and/or remediation.

- Hydrogeology to characterize contaminants and mitigate adverse effects on public health and the environment.
- Fate and transport principles to support decisions regarding risk assessment and risk management of contaminated sites.
- Basic hazardous waste management practices and procedures to ensure laws and regulations are met and public safety is protected.
- Basic methods to transport, store, recover, treat, and use hazardous materials to assist in determining if laws and regulations are followed.
- Soil classification systems [e.g., Unified Soil Classification System and the Munsell Color System, American Society for Testing & Materials (ASTM)] to characterize site conditions.
- Laboratory methods to assess for specific classes of compounds and/or geotechnical characteristics.
- Interactions between various environmental media to understand the fate and transport of contaminants in the environment.
- Various types of sampling equipment and techniques to use in collecting samples from the environment.
- Field methods to assess for specific classes of compounds and/or geotechnical characteristics.

Ability to:

- Use available geologic and contaminant data to create and/or review cross-sectional diagrams, contour maps, and/or geological maps.
- Evaluate the nature and extent of chemical hazards and/or contaminants at sites to assess potential concern to human health and the environment.
- Evaluate subsurface media (e.g., soil, soil gas, soil pore liquids, groundwater) to support site investigation, cleanup, and regulatory decisions.
- Evaluate surface media (e.g., ambient and indoor air, aerial deposition, water, sediments) to support site investigation, cleanup, and regulatory decisions.
- Critically analyze site-related information to reach scientifically and technically defensible conclusions regarding site characterization and/or remediation.
- Classify geologic materials using classification systems [e.g., Unified Soil Classification System, the Munsell Color System, American Society for Testing & Materials (ASTM)] to accurately and consistently describe materials for use in site characterization.
- Create charts and graphs (e.g., time series, geochemical diagrams, regression analysis) to illustrate and analyze site data.
- Prepare illustrations (e.g., maps, flow charts, posters) to present information to the public and management.
- Use mapping and land surveying techniques (e.g., global positioning systems) to locate features in the field.
- Write technical documents (e.g., work plans, reports, memoranda) in a logical and understandable manner.
- Conduct inspections of sites and/or hazardous waste facilities to assess compliance and/or to identify potential risks.
- Oversee geologic and hydrogeologic investigations to assess conformance with work plans, design specifications, and quality assurance/quality control decisions.

VETERANS' PREFERENCE

Veterans' Preference will be granted for this examination. Effective January 1, 2014, in accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, widow or widower of a veteran, or spouse of a 100 percent-disabled veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligibility list. This section shall not apply to any veteran who has been dishonorably discharged or released.

CAREER CREDITS

Career Credits **will not** be added to the final score for this exam, because it does not meet the

requirements to qualify for Career Credits.

CONTACT INFORMATION

If you have any questions concerning this examination bulletin, please contact:

California Department of Human Resources
Attn: Examination Services
1515 S Street
Sacramento, CA 95811

Phone: 1-866-844-8671
California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

TTY is a Telecommunications Device for the Deaf, and is reachable only from phones equipped with a TTY Device.

GENERAL INFORMATION

Applications are available at www.jobs.ca.gov and local offices of the Employment Development Department.

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described on this bulletin will be rated against a predetermined job-related rating, and all candidates who pass will be ranked according to their scores.

The California Department of Human Resources reserves the right to revise the examination plan to better meet the needs of the service, should the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules, and all competitors will be notified.

Candidates needing special testing arrangements due to a disability must mark the appropriate box on the application and contact the testing department.

Hiring Interview Scope: In a hiring interview, in addition to the scope described in this bulletin, the panel will consider education, experience, personal development, personal traits, and fitness. In appraising experience, more weight may be given to the breadth and recency of pertinent experience, and evidence of the candidate's ability to accept and fulfill increasing responsibilities than to the length of his/her experience. Evaluation of a candidate's personal development will include consideration of his/her recognition of his/her own training needs; his/her plans for self-development; and the progress he/she has made in his/her efforts toward self-development. For more information, you may refer to the classification specification at: <http://www.calhr.ca.gov/state-hr-professionals/pages/3756.aspx>.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, the ability to work cooperatively with others, and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, and 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

Veterans' Preference: Effective January 1, 2014, in accordance with Government Codes 18973.1 and

18973.5, Veterans' Preference will be awarded as follows: 1) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2) An entrance examination is defined, under the law, as any open competitive examination. And 3) Veterans' Preference is not granted once a person achieves permanent civil service status.

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (Std. Form 1093), which is available at <http://jobs.ca.gov/Job/VeteransInformation>, and the Department of Veterans Affairs.

TAKING THE EXAM

When you click the link below, you will be directed to the Training and Experience Evaluation. At the end of the Training and Experience Evaluation, it will be instantly scored.

[Click here to go to the Training and Experience Evaluation.](#)